

Remarks - General

By the above amendment, Applicant has amended the specification to provide proper antecedent basis for the claimed subject matter and has amended the claims so that they overcome the technical rejections under 35 USC 112. Applicant requests reconsideration and withdrawal of the objections under 35 U.S.C. 101, 102, and 103 as the Applicant has amended all of his claims and the claims as amended are proper, definite, and define a novel structure which is also unobvious.

Specification Has Been Amended To Provide Proper Antecedent Basis

Applicant has amended the specification to provide for proper antecedent basis of his amended independent and dependent claims.

Specification And Claims Have Been Amended To Overcome Claim Rejections Under 35 U.S.C. 112

Applicant has amended his specification to provide proper antecedent basis for his amended claims which now distinctly claim the subject matter which he regards as his invention. As amended, both the independent and dependent claims are method claims.

The Applicant's amended independent claim 29 describes, the invention in its broadest form as a method for constructing a contract. Independent claim 34 limits this method to constructing compensation contracts. Independent claim 39 limits this method to constructing contracts that will be listed on an exchange. The dependent claims limit each independent claim to constructing contracts with certain types of underlying assets. (i.e., financial assets, commodities, real property, and personal property).

Objection to the Claims Rejection Under 35 USC § 101

The Office Action rejected the claims under § 101 since the claimed invention was said to lack a useful, concrete, and tangible result. The claims were also rejected on the grounds that the invention was not a “new and useful process,” and that they overlapped two different statutory classes of invention. Applicant requests reconsideration and withdrawal of these objections in consideration of the Applicant’s amended claims which meet the requirements of § 101.

Amended Claims Meet The Requirements Of § 101

The amended claims describe a method for constructing contracts by specifying basic option terms and a methodology that uses an option pricing model that will determine the value of said contract. Traditionally option contracts have been constructed by specifying only the basic option terms such as the underlying asset, the strike price, the expiration date, the ability to exercise, etc.

Constructing a contract using both of these elements in this way is new, concrete, and tangible. Moreover, it is useful because it contractually obligates the parties to value the contract according to the valuation methodology specified by the contract and this has many advantages as described in the Specification under the section entitled **BACKGROUND OF INVENTION-OBJECTS AND ADVANTAGES.**

As the specification notes, options constructed in the traditional way contain many descriptive elements, but they do not contain a description of how the parties will value said contracts. Fig 1 shows that the claimed invention only works if the parties to the option contract can agree on both the basic option terms and “a methodology that uses an option pricing model to determine the value of the option.”

The combination of these two elements makes this invention new, and the result must be deemed to be concrete and tangible. Either an option contract has been constructed in this manner and has such a valuation methodology embedded in it or it does not.

Options constructed in the traditional way make option valuation inherently subjective. The claimed invention eliminates the subjectivity inherent in this process by making option valuation objective. No analysis or experimentation is required to gain the benefits of using this method.

Amended Claims No Longer Span Different Statutory Classes of Invention

Applicant has amended all of his claims so that they no longer span or overlap two different statutory classes of invention. As amended, the dependent claims now meet the requirements of 35 USC § 101 and § 112.

Amended Claims Describe A New Process That Is Useful

Practitioners in the art have traditionally pursued two different paths to improve option performance and create a larger market for options. Mathematicians have developed better mathematical models for estimating the theoretical value of options in the hope that these models will make option users feel more comfortable using these contracts.

Alternatively, option exchanges and people who trade these contracts have attempted to get people more comfortable and more interested in trading options by creating a broader and deeper options market. They have attempted this by creating better trading platforms and by expanding the variety of option contracts that are traded so that they can increase trading volumes and improve the liquidity in this market.

Mathematicians are inherently skeptical of market behavior and are constantly seeking to unlock its mysteries and to show how irrational market behavior can distort prices for financial instruments such as options. Market participants are similarly skeptical of option valuation models, and believe that the market is a much better predictor and indicator of value than any model.

The claimed invention conjoins these two disparate ways of thinking about the value of options in a way that reconciles both purposes and objectives. By constructing

contracts that are embedded with a valuation methodology, one can combine the best aspects of the models and the markets for valuing options. This makes options constructed in this way more liquid and more certain and facilitates trading by reducing the transaction costs that must be incurred.

Options devised using traditional methods permit only three possible courses of action. The option holder may: let the options expire worthless, exercise the options and request the underlying asset, or sell the options, assuming this is permitted and feasible. The claimed invention enables one to create another course of action for the option holder. The holder of a Model Option can demand to receive both the intrinsic and time value of the option as determined using the valuation methodology that was specified in the option contract.

Claimed Invention Produces Many Substantial Benefits

The benefits and usefulness of the claimed invention are demonstrable and multifaceted. A practitioner, who is skilled in the art, would understand how to derive the claimed benefits of this method by reading the Specification.

As described in the section entitled BACKGROUND OF INVENTION--OBJECTS AND ADVANTAGES, the claimed invention objectifies the uncertainty associated with the valuation of options using an agreed value approach, enabling one to employ the financial leverage of options without being subject to the limitations and imperfections of the traditional options market.

Model Options enable ready and continuous access to option pricing, even when there is no active options market. This makes this method of constructing an option contract particularly valuable and important in instances where: the current options market does not work at all for the type of option that is desired; where thin trading may distort option prices; or during times of extreme market stress.

However, the claimed invention is useful for creating option contracts even where the current options market functions appropriately because it enables buyers and sellers of Model Options to easily understand the components of option valuation. This feature enables them to easily account for the value of this type of option in their books and records, alleviates the potential for manipulating the option's value, and allows more active and more accurate management of the risk associated with each of the components of an option's value.

Furthermore, the claimed invention helps reduce the transaction costs associated with options by enabling the potential for cash settlement between the parties to the option contract. For example, a traditional call option on a company's stock permits the holder to settle the contract prior to expiration by paying the strike price and requesting delivery of the underlying asset.

In this example, the option holder may have to sell some other asset that she owns to generate the funds to pay for the strike price, incurring transaction costs. She must incur additional transaction cost to sell the assets received pursuant to the option contract, and potentially more transaction costs as she seeks to regain her position in the asset that she previously liquidated (to generate the funds necessary to settle the option contract). In the case of an option trading on an exchange, the option holder may sell her position rather than force delivery of the underlying asset, but she must pay a transaction fee for this privilege.

Using the claimed invention, the holder could simply demand a cash settlement, alleviating the hassle and expense of these additional steps. Eliminating this additional cost, would be beneficial to both parties to an option contract.

Because the claimed invention enables options to be traded without needing the price discovery function of a recognized options exchange, it has the potential to reduce the transaction cost of options in another way as well. Qualified parties, who do not need

the credit enhancement function of a recognized exchange, may agree to exchange Model Options with each other without paying any transaction fees.

The present specification clearly and completely teaches how to use this invention to achieve these and other benefits and advantages. Accordingly, Applicant submits that the specification does comply with § 101 and therefore requests withdrawal of these objections.

Objection to the Claims Rejection Under 35 USC § 102

The claims were rejected under 35 USC § 102(e) since they were said to be anticipated by Brundobler, U.S. Patent No. 7,065,475, Pandher, U.S. PG-Pub No. 2004/0128221, and Bowen et al., U.S. PG-Pub No. 2005/0119962. Applicant requests reconsideration and withdrawal of these objections since none of these prior art citations teach a method for creating or constructing an option contract. In addition, none of the references teach that an option contract should include a valuation methodology in the contract that includes an option pricing model. Also, none of the references cited teach the benefits that may be had by using the claimed invention.

Brundobler And Pandher Teach How To Construct Option Valuation Models And Machinery

Brundobler and Pandher describe machinery and computational models for valuing option contracts. Both teach that an option valuation or pricing model may help market participants estimate the value of traditional options. However, neither reference teaches that one should include such a model in the option contract itself.

An option valuation model, by itself, does not determine the value of a traditional option since neither counterparty is under an obligation to use any particular option valuation model or do anything more than deliver the underlying asset at the strike price that is stated in the contract. Understanding this difference is critically important to understanding the novelty, usefulness, and unobviousness of the claimed invention.

Pandher describes how an option pricing model can be used to value a stock option that a company might grant to its employees and how they might use the value estimated by the model to account for the expense of the option grant in its books and records. He does not teach that the option valuation model or a methodology for using such a model should be included in the option contract or that there might be benefits from doing this.

Bowen et al. describe a Process for Creating Exchange Traded Funds

Bowen et al., describe a process “which permits the user to create a security of a special purpose entity having among its assets contracts or swaps based on a measure of value.” They teach a method for creating an exchange-traded fund which is a contract, but they do not teach anything about option contracts.

Although Bowen et al., describe a contract that will be settled via cash payment, there is no other way that the contract they describe could be settled since there is no underlying asset that can be delivered in this instance. Nevertheless, Applicant has eliminated the claims related to using this method to create a cash settlement feature, since it is obvious from the specification that that is one of the major reasons why one would want to use this method.

Bowen et al do not teach the creation of a new type of contract that uses both elements of the claimed invention. Moreover, they do not anticipate any of the benefits that would be derived from this method.

Option Pricing Models and the Construction of New Forms of Securities Do not Anticipate the Claimed Invention

The fact that option pricing models may be used to estimate the value of different types of options such as those that are traded on an exchange (Brundobler) or those used as compensation (Pandher), and that new securities may be constructed and traded with

different underlying assets or different settlement features (Bowen et al.) has been known for many years. These features alone or in combination do not anticipate any aspect of the claimed invention or the benefits derived from the claimed invention.

In a traditional option, the buyer and seller agree on the basic option terms such as the underlying asset, the strike price, the expiration date, the ability to exercise the option, the number of options to be traded, and an option premium. A Model Option describes each of these terms as well, but it also specifies a particular valuation methodology that uses an option pricing model that the parties will use to determine what the contract is worth at a given point in time. The option pricing model they use in the contract's valuation methodology could be Brundobler's, Pandher's, Black and Scholes, Whaley, Binomial Lattice, or any other option pricing model that both parties agree will be used to determine the value of the Model Option.

The Applicant is not claiming rights to any particular option valuation methodology or model. Instead, he is claiming rights to a method for constructing a contract so that it incorporates both basic option terms and an option valuation methodology that the buyer and seller will use to determine the value of the contract at any point in the future. In essence, this is a means of ensuring that an option will have the value that a pre-specified option valuation methodology says that it should have at any point in time. This has significant benefits as described in the specification and above.

The present Applicant submits that none of the prior art cited teaches how to use the claimed invention or describes the benefits and advantages that result from use of this method. Accordingly Applicant submits that the specification and claims as amended are in compliance with § 102 and therefore requests withdrawal of these objections.

Objection to the Claims Rejection Under 35 USC § 103

Claims 18, 19, 20, 21, 22, 23, and 24 were rejected under 35 USC § 103(a) since they were said to be unpatentable over Brundobler, U.S. Patent No. 7,065,475; Pandher, U.S. PG-Pub No. 2004/0128221; and Bowen et al., U.S. PG-Pub No. 2005/0119962.

Applicant requests reconsideration and withdrawal of these objections as pertaining to his amended claims since none of these prior art citations describe a method of constructing a contract that specifies both basic option terms and a methodology that uses an option pricing model that will determine the value of said contract.

The prior art references cited do not teach the benefits of combining the two elements specified in the amended claims. Moreover, it would not be obvious for one skilled in the art to combine these elements in this way since this method of contract construction solves an unrecognized problem and goes against the teachings in this field.

Prior Art is “Nonanalogous”

As described previously, Brundobler and Pandher teach only that option valuation models can be useful in evaluating the price or value of options, regardless of: whether they are traded on or off of an exchange; whether they are used to compensate employees of a business; or what type of underlying asset they derive their value from. They do not teach that option valuation models should be incorporated into the option contract or describe any benefits that might result from using the claimed invention.

Bowen et al also teach some of the basics concerning derivative securities such as how they are constructed, the fact they may be exchange traded and that they may be settled in cash. However, Bowen et al teach a process for designing exchange-traded funds not

for creating option contracts. Bowen et al teach nothing about the desirability or benefits of including an option valuation methodology in an option contract.

Even if one combined all of the prior art references cited, it would not be obvious to combine the two elements necessary for this method of option construction, and the features of this method of constructing options would not be shown.

One must conclude that these prior art references are from different fields and represent “nonanalogous art” since these references do not teach the claimed methods.

Claimed Invention Solves Different Problems and is Contrarian

The claimed invention solves a different and unrecognized problem than the prior art that is recited. There is nothing in the prior teachings that suggest that there is an inherent problem with the current methodology for option construction, or that there may be benefits derived from constructing options in the manner specified by the present invention.

The prior art teaches that one should use or develop superior models for option valuation and that one should use or develop superior trading platforms with substantial transaction volume. Until the present invention, these teachings were mutually exclusive.

The claimed invention may be described as contrarian, since it clearly goes against the teachings of the prior art. The claimed invention improves option performance without improving the trading platform and improves option valuation without creating a better option valuation model.

Claimed Invention Has Not Been Implemented Due To Unobviousness

The options market is a very large market comprised of many option users, academics, and theoreticians. Despite the overwhelming practical and theoretical interest in this field, the prior art lacks any suggestion of the claimed invention or that there might be benefits derived from such a method.

The benefits of the claimed invention are described fully in the specification and are substantial and indisputable. This method of constructing option contracts can: reduce transaction costs; create markets and trading opportunities that are impossible using option contracts that have been constructed in the traditional way (including long-duration option contracts, thinly-traded option contracts, and deep out of the money contracts); make option values more objective, certain, and less manipulable; enable easier accounting for option contracts, make options more liquid; make the risk of variation in option values more manageable; and reduce the impact of market distortions on the valuation of options.

Given how large and important the options market is, the most reliable test of obviousness is whether the options market has embraced this method of option construction. Ultimately, one must conclude that the claimed invention is unobvious since:

1. This method cost almost nothing to implement;
2. The benefits of this method are (in hindsight) obvious, substantial, and multifaceted; and
3. Practitioners in the field have not yet adopted this method of constructing options because they do not know of it, do not understand the resulting benefits, or feel that it goes against the teachings of this field.

For all of the reasons described above, the Applicant submits that the specification and claims as amended are in compliance with § 103 and therefore requests withdrawal of these objections.

Conclusion

For all of the above reasons, Applicant submits that the specification and claims are now in proper form and that the claims all define patentably over the prior art. Therefore, Applicant submits that this application is now in condition for allowance, which action he respectfully solicits.

Conditional Request for Constructive Assistance

Applicant has amended the specification and claims of this application so that they are proper, definite, and define novel structure which is also unobvious. If, for any reason this application is not believed to be in full condition for allowance, Applicant respectfully requests the constructive assistance and suggestions of the Examiner pursuant to M.P.E.P. § 707.07(j) in order that the undersigned can place this application in allowable condition as soon as possible.

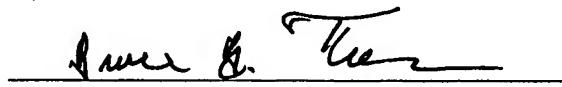
Respectfully,



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